



**Smart Bike Rearview  
Tail Light W100  
Operation Manual**

# Product introduction

## **Warning**

The device can improve situational awareness. It is not a replacement for cyclist attentiveness and good judgment. Always maintain awareness of your surroundings, and operate the bike in a safe manner. Failure to do so could result in serious injury or death.

Always consult your physician before you begin or modify any exercise program.

## **Getting started**

You can use the smart rearview taillight with your compatible bike computer or a smartphone. This list provides an overview of the installation and setup tasks.

- Charge the device (Charging the device, Page 7).
- Install the seat post mount (Installing the seat post mount, Page 2).
- Install the seat bow mount (Installing the seat bow mount, Page 2).
- If you are using a compatible bike computer, pair the devices (The smart rearview taillight and your compatible bike computer, Page 4).
- If you are using your smartphone, download the smart rearview taillight APP to your smartphone and pair the devices (the smart rearview taillight APP, Page 5)

## **Tips for installing the device**

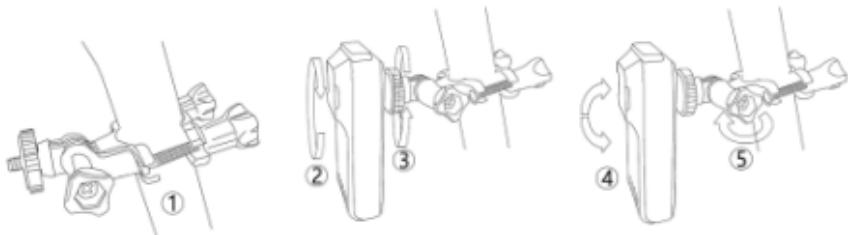
The smart rearview taillight can detect approaching vehicles up to 140 meters away.

- Select a secure location to mount the device where it does not interfere with the safe operation of your bike.
- Mount the device as high on the seat post as possible for optimal light visibility and radar detection.

Note: The mount surface should be vertical. The mounts are designed to accommodate most seat post angles.

- Mount the device on the seat post 250 mm to 1200 mm above the road.
- Install the device correctly.  
The device faces backward, perpendicular to the road.
- Make sure there are no obstructions in front of the device.
- Test in a safe environment during the day.

## Installing the seat post mount



- 1 Fix the mount on the seat post①.
- 2 Screw the W100 clockwise and install it on the mount②.
- 3 Screw the nut anticlockwise to fasten W100③.
- 4 Adjust W100 to the angel perpendicular to the ground④ and tighten the screw clockwise⑤.

## Installing the seat bow mount



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- 1 Fix the mount on the seat bow①.
- 2 Screw the W100 clockwise and install it on the mount②.
- 3 Screw the nut anticlockwise to fasten W100③.
- 4 Adjust W100 to the angel perpendicular to the ground④ and tighten the screw clockwise⑤.

## Device overview



□ Device key	Press and hold for 3s to turn on/off the device. Change the working mode by short press. Broadcast the remaining electric quantity by short press when startup for the first time. Switch the working mode in case of short press anew within 4s after short press. Broadcast the remaining electric quantity in case of short press again after more than 4s. Press and hold for 10s to forced shutdown the device.
□ Status LED	Changes color based on the battery level and charging status.

## Status LED

LED State	Status
Flashing blue	The device is in working mode.
Solid blue	The device is fully charged.
Flashing red	The device is in a state of low battery.
Solid red	The device is charging.

## Working mode

You can switch the working mode by short press of the device key.

Mode	Default Light State	Default Smart State	When The vehicle approaches Prompt
Single smart	Light off	On	Light will flash while vehicles are approaching from behind and graphic of vehicle trajectory will display on smartphone APP and bike computer. Loudspeaker is off work.
Single taillight	Light pulse flashing	Off	Light keeps pulse flashing. Smart and loudspeaker are off work.

Solid	Light always-on	On	Light will flash while vehicles are approaching from behind and graphic of vehicle trajectory will display on smartphone APP and bike computer. Loudspeaker is off work.
Flash (Default)	Light pulse flashing	On	Light will flash while vehicles are approaching from behind and graphic of vehicle trajectory will display on smartphone APP and bike computer. Loudspeaker rings.

## Turning off the taillight

Switch to single smart mode or press the device key for 3s for shutdown.

## Sleep/wakeup of the device

Sleep/wakeup	Operation steps	Phenomena
Sleep	<ul style="list-style-type: none"> <li><input type="checkbox"/> The device is in working condition</li> <li><input type="checkbox"/> Static for 4min</li> </ul> <p>Remarks: The forced shutdown will arise in case of being static for 3h</p>	The status LED changes from flashing to be off
Wakeup	<ul style="list-style-type: none"> <li><input type="checkbox"/> The sleep of the device arises</li> <li><input type="checkbox"/> Shake the device</li> </ul>	The status LED changes from being off to flashing

## The smart rearview taillight and your compatible bike computer

### Pairing the smart rearview taillight with your compatible bike computer

Select a bike computer compatible with ANT+ smart rearview taillight. It's necessary to pair two devices when connecting the device to the bike

computer for the first time.

After initial pairing, the bike computer will automatically connect to the smart rearview taillight when you start moving when the smart rearview taillight is activated and within the connection range.

The steps are as follows:

1 Keep the bike computer and the device within 3m.

Notes: At the time of pairing, keep a distance of 10m from other ANT+ sensors.

2 Enable the bike computer.

3 Search the sensor on the bike computer.

4 When the smart rearview taillight is closed, press the device key for 3s for startup to entering the pairing mode.

5 Select your sensor and choose to add it.

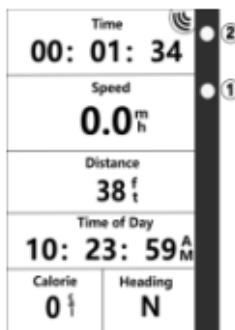
When the smart rearview taillight is paired with your bike computer, the sensor state is connected. The  smart state icon appear solid on the top banner of the home screen.

Remarks: There is a difference in bike computer menu options of different brands and smart status icons. The bike computer actually used shall prevail.

## **Viewing smart on your bike computer**

Start riding.

The smart data will be displayed on the activity data page.



When the vehicle approaches you, the vehicle position LED  will move upward. The danger level LED  will change with the threat level. Green means there is no approaching vehicle behind. Orange means an approaching vehicle. Red means noticing that the vehicle is approaching at high speed.

Remarks: The smart data shown by the bike computeres of different brands may be different. The bike computer actually used shall prevail.

## **The smart rearview taillight and the smart rearview taillight APP**

The smart rearview taillight APP connects to the smart rearview taillight via Bluetooth. The APP can be used to view the setting and display the

smart data.

- 1 After pairing, APP will display a colored status bar to indicate the level of danger incurred by the approaching vehicles.
- 2 You can enable the vibration alert on your smartphone so that such information can be known even though the smartphone is in the pocket which doesn't need to be installed on the handlebar.

You can scan the QR code below to download and install the APP for IOS/Android.



## **Pairing the smart rearview taillight with your smartphone**

When the smart rearview taillight is connected to the smart rearview taillight APP, the pairing of two devices shall be performed. After initial pairing, the smart rearview taillight APP will automatically connect to the smart rearview taillight when you start moving when the smart rearview taillight is activated and within the connection range.

- 1 Bring your the smartphone within 3m of the smart rearview taillight.  
Note: Stay 10 m away from other Bluetooth sensors while pairing.
- 2 On your compatible smartphone, enable Bluetooth technology.
- 3 Install and open the APP from the APP Store on your smartphone.
- 4 Select "Search" and choose the corresponding smart rearview taillight for pairing.
- 5 While the smart rearview taillight is turned off, hold the device key for 3s for startup to enter pairing mode.

When the smart rearview taillight is successfully paired with a smartphone, the APP will skipped to the ridding interface to display (⌚) the current state.

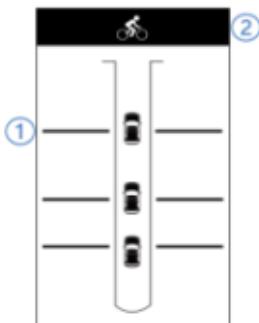
Remarks: The APP may be updated ceaselessly. The current status icon

may be different. The APP actually used shall prevail.

## Viewing smart data on the APP

Start riding.

The smart data will be displayed on the activity data page.



When the vehicle approaches you, the vehicle position LED  will move upward. The danger level LED  will change with the threat level. Green means there is no approaching vehicle behind. Orange means an approaching vehicle. Red means noticing that the vehicle is approaching at high speed.

Remarks: The APP may be updated ceaselessly. The interface may be different. The APP actually used shall prevail.

## APP alert setting

Before customizing the alert setting on the APP, pairing the device shall be performed.

- 1 Click the "Set" button to skip to the setting page in the APP.
- 2 Enable or disable SOUND and VIBRATE options.

## Changing the smart rearview taillight

- 1 Open the APP.
- 2 Click the "Set" button and skip to the setting page in the APP.
- 3 Click the "Delete" button and skip to the page of searching the device.
- 4 Click the "Search" button and choose the smart rearview taillight be changed.

## Device information

### Charging the device

#### Notice

To prevent corrosion, keep the TYPE-C port near dry before charging or connecting to a computer.

The device is powered by a built-in lithium-ion battery that you can charge using a USB port on your computer or standard wall outlet.

Note: The device does not charge when outside the approved temperature range (Specifications, Page 9).

- 1 Pull up the weather cap □ from the device TYPE-C port □.



- 2 Plug the small end of the USB cable into the TYPE-C port on the device.
- 3 Plug the large end of the USB cable into an AC adapter or a computer USB port.
- 4 Plug the AC adapter into a standard wall outlet.
- 5 Charge the device completely.  
The status LED is solid red while charging.  
The status LED is solid blue when charging is completed.
- 6 Remove the USB cable, and close the weather cap.

### Tips for charging the device

- Connect the charger securely to the device.  
You can charge the device by plugging the USB cable into an AC adapter with a standard wall outlet or a USB port on your computer. Charging a fully depleted battery takes about 5 hours using a computer and 3 hours using an AC power source.
- Remove the charger from the device when the status LED is solid blue.

### Device care

#### Notice

Do not store the device where prolonged exposure to extreme temperatures can occur, because it can cause permanent damage.

Avoid organic solvents, chemical cleaners or insect repellents that can damage plastic components of the device.

Secure the weather cap tightly to prevent damage to the TYPE-C port.

Avoid extreme shock and harsh treatment, because it can degrade the life of the product.

## Cleaning the device

### Notice

Do not use a cloth or any material that can scratch the optical lens. Scratching the optical lens may cause poor radar performance.

- Clear mud and dirt from the weather cap area.
- While the weather cap is closed, hold the device under running water. After cleaning, allow the device to dry completely.

## Radar Detection

### Warning

The device can improve situational awareness. It is not a replacement for cyclist attentiveness and good judgment. Always maintain awareness of your surroundings, and operate the bicycle in a safe manner. Failure to do so could result in serious injury or death.

- The smart rearview taillight detects approaching vehicles up to 140m away.
- The smart rearview taillight detects approaching vehicle speed from 10 to 120 km/h (from 6 to 74 mph).  
Note: The smart rearview taillight does not detect vehicles traveling at the same speed as your bike.
- The smart rearview taillight beam width is 40 degrees. It provides smart coverage for typical bends in the road.
- The smart rearview taillight can detect up to eight approaching vehicles.

## Specifications

Battery type	Rechargeable, built-in lithium-ion battery
Battery life	Up to 14 hr. in solid mode Up to 18 hr. in flash mode Up to 24 hr. in single taillight mode Up to 24 hr. in single radar mode Up to 3 mo. in standby mode
Operating temperature range	From -20° to 50° (from -4° to 122°)
Charging temperature range	From 0° to 45° (from 32° to 113°)
Wireless protocol	ANT+ and BLE
Water rating	IEC 60529 IPx6
Luminous flux	20lm (solid mode) 20lm (flash mode) 20lm (single taillight mode)

## Troubleshooting

### The smart rearview taillight disconnects from the compatible bike computer

#### **Warning**

If the smart rearview taillight is not connected or fails to send smart detection information to the compatible bike computer, it's recommended that you should stop riding and check the device in a safe location. Failure to do so could result in serious injury or death.

- Turn both devices off, and turn them back on.
- Pair the devices (Pairing the smart rearview taillight with your compatible bike computer, Page 4).

The smart rearview taillight send smart data to the compatible bike computer. The compatible bike computer displays  when connected.

Remarks: The smart state icon of the bike computeres of different brands may be different. The bike computer actually used shall prevail.

### The smart rearview taillight disconnects from the APP

#### **Warning**

If the smart rearview taillight is not connected or fails to send smart detection information to the APP, it's recommended that you should stop riding and check the device in a safe location. Failure to do so could result in serious injury or death.

- Turn off Bluetooth setting of your smartphone, and turn it back on.
- Turn both devices off, and turn them back on.

The smart rearview taillight send smart data to the APP. The APP displays  when connected.

Remarks: The APP may be updated ceaselessly. The current status icon may be different. The APP actually used shall prevail.

### The smart rearview taillight device does not turn on

Ensure that the device is within the permissible operating temperature range ( Specifications, Page 9).

Charge the device for 4h (Charging the device, Page 7).

If the device does not turn on, disconnect the charger and charge it for another 4h.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference,
- (2) this device must accept any interference received, including

interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception,

which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.